Validated By CRFValidator v 1.0.3

Application No: 10580542 Version No: 1.0

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Output Set:

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Finished: 2007-09-27 14:48:39.197
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Total Errors: 0
No. of SeqIDs Defined: 15
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SEQUENCE LISTING

<110> Wallach, David
Ramakrishnan, Parameswaran
Shmushkovich, Taisia
Wang, Wangxia

<120> METHODS OF REGULATING AN IMMUNE RESPONSE

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<170> PatentIn version 3.2

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<213> Homo sapiens

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20 25 30

Gly Lys Lys Gln Ser Ser Val Tyr Lys Leu Glu Ala Val Glu Lys Ser
35 40 45

Pro Val Phe Cys Gly Lys Trp Glu Ile Leu Asn Asp Val Ile Thr Lys
50 55 60

Gly Thr Ala Lys Glu Gly Ser Glu Ala Gly Pro Ala Ala Ile Ser Ile
65 70 75 80

Ile Ala Gln Ala Glu Cys Glu Asn Ser Gln Glu Phe Ser Pro Thr Phe
85 90 95

Ser Glu Arg Ile Phe Ile Ala Gly Ser Lys Gln Tyr Ser Gln Ser Glu
100 105 110

Ser Leu Asp Gln Ile Pro Asn Asn Val Ala His Ala Thr Glu Gly Lys
115 120 125

Met Ala Arg Val Cys Trp Lys Gly Lys Arg Arg Ser Lys Ala Arg Lys
130 135 140

Lys Arg Lys Lys Lys Ser Ser Lys Ser Leu Ala His Ala Gly Val Ala
145 150 155 160

Leu Ala Lys Pro Leu Pro Arg Thr Pro Glu Gln Glu Ser Cys Thr Ile
165 170 175

```
Pro Val Gln Glu Asp Glu Ser Pro Leu Gly Ala Pro Tyr Val Arg Asn
            180                 185                 190

Thr Pro Gln Phe Thr Lys Pro Leu Lys Glu Pro Gly Leu Gly Gln Leu
        195                 200                 205

Cys Phe Lys Gln Leu Gly Glu Gly Leu Arg Pro Ala Leu Pro Arg Ser
    210                 215                 220

Glu Leu His Lys Leu Ile Ser Pro Leu Gln Cys Leu Asn His Val Trp
225                 230                 235                 240

Lys Leu His His Pro Gln Asp Gly Gly Pro Leu Pro Leu Pro Thr His
                245                 250                 255

Pro Phe Pro Tyr Ser Arg Leu Pro His Pro Phe Pro Phe His Pro Leu
            260                 265                 270

Gln Pro Trp Lys Pro His Pro Leu Glu Ser Phe Leu Gly Lys Leu Ala
        275                 280                 285

Cys Val Asp Ser Gln Lys Pro Leu Pro Asp Pro His Leu Ser Lys Leu
    290                 295                 300

Ala Cys Val Asp Ser Pro Lys Pro Leu Pro Gly Pro His Leu Glu Pro
305                 310                 315                 320

Ser Cys Leu Ser Arg Gly Ala His Glu Lys Phe Ser Val Glu Glu Tyr
                325                 330                 335

Leu Val His Ala Leu Gln Gly Ser Val Ser Ser Ser Gln Ala His Ser
            340                 345                 350

Leu Thr Ser Leu Ala Lys Thr Trp Ala Ala Arg Gly Ser Arg Ser Arg
        355                 360                 365

Glu Pro Ser Pro Lys Thr Glu Asp Asn Glu Gly Val Leu Leu Thr Glu
    370                 375                 380

Lys Leu Lys Pro Val Asp Tyr Glu Tyr Arg Glu Glu Val His Trp Ala
385                 390                 395                 400
```

```
Thr His Gln Leu Arg Leu Gly Arg Gly Ser Phe Gly Glu Val His Arg
                405                 410                 415

Met Glu Asp Lys Gln Thr Gly Phe Gln Cys Ala Val Lys Lys Val Arg
            420                 425                 430

Leu Glu Val Phe Arg Ala Glu Glu Leu Met Ala Cys Ala Gly Leu Thr
        435                 440                 445

Ser Pro Arg Ile Val Pro Leu Tyr Gly Ala Val Arg Glu Gly Pro Trp
    450                 455                 460

Val Asn Ile Phe Met Glu Leu Leu Glu Gly Gly Ser Leu Gly Gln Leu
465                 470                 475                 480

Val Lys Glu Gln Gly Cys Leu Pro Glu Asp Arg Ala Leu Tyr Tyr Leu
                485                 490                 495

Gly Gln Ala Leu Glu Gly Leu Glu Tyr Leu His Ser Arg Arg Ile Leu
            500                 505                 510

His Gly Asp Val Lys Ala Asp Asn Val Leu Leu Ser Ser Asp Gly Ser
        515                 520                 525

His Ala Ala Leu Cys Asp Phe Gly His Ala Val Cys Leu Gln Pro Asp
    530                 535                 540

Gly Leu Gly Lys Ser Leu Leu Thr Gly Asp Tyr Ile Pro Gly Thr Glu
545                 550                 555                 560

Thr His Met Ala Pro Glu Val Val Leu Gly Arg Ser Cys Asp Ala Lys
                565                 570                 575

Val Asp Val Trp Ser Ser Cys Cys Met Met Leu His Met Leu Asn Gly
            580                 585                 590

Cys His Pro Trp Thr Gln Phe Phe Arg Gly Pro Leu Cys Leu Lys Ile
        595                 600                 605

Ala Ser Glu Pro Pro Pro Val Arg Glu Ile Pro Pro Ser Cys Ala Pro
    610                 615                 620
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```
Leu Thr Ala Gln Ala Ile Gln Glu Gly Leu Arg Lys Glu Pro Ile His
625                 630                 635                 640

Arg Val Ser Ala Ala Glu Leu Gly Gly Lys Val Asn Arg Ala Leu Gln
                645                 650                 655

Gln Val Gly Gly Leu Lys Ser Pro Trp Arg Gly Glu Tyr Lys Glu Pro
            660                 665                 670

Arg His Pro Pro Pro Asn Gln Ala Asn Tyr His Gln Thr Leu His Ala
        675                 680                 685

Gln Pro Arg Glu Leu Ser Pro Arg Ala Pro Gly Pro Arg Pro Ala Glu
    690                 695                 700

Glu Thr Thr Gly Arg Ala Pro Lys Leu Gln Pro Pro Leu Pro Pro Glu
705                 710                 715                 720

Pro Pro Glu Pro Asn Lys Ser Pro Pro Leu Thr Leu Ser Lys Glu Glu
                725                 730                 735

Ser Gly Met Trp Glu Pro Leu Pro Leu Ser Ser Leu Glu Pro Ala Pro
            740                 745                 750

Ala Arg Asn Pro Ser Ser Pro Glu Arg Lys Ala Thr Val Pro Glu Gln
        755                 760                 765

Glu Leu Gln Gln Leu Glu Ile Glu Leu Phe Leu Asn Ser Leu Ser Gln
    770                 775                 780

Pro Phe Ser Leu Glu Glu Gln Glu Gln Ile Leu Ser Cys Leu Ser Ile
785                 790                 795                 800

Asp Ser Leu Ser Leu Ser Asp Asp Ser Glu Lys Asn Pro Ser Lys Ala
                805                 810                 815

Ser Gln Ser Ser Arg Asp Thr Leu Ser Ser Gly Val His Ser Trp Ser
            820                 825                 830

Ser Gln Ala Glu Ala Arg Ser Ser Ser Trp Asn Met Val Leu Ala Arg
        835                 840                 845

Gly Arg Pro Thr Asp Thr Pro Ser Tyr Phe Asn Gly Val Lys Val Gln
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```
    850                 855                 860

Ile Gln Ser Leu Asn Gly Glu His Leu His Ile Arg Glu Phe His Arg
865                 870                 875                 880

Val Lys Val Gly Asp Ile Ala Thr Gly Ile Ser Ser Gln Ile Pro Ala
                885                 890                 895

Ala Ala Phe Ser Leu Val Thr Lys Asp Gly Gln Pro Val Arg Tyr Asp
            900                 905                 910

Met Glu Val Pro Asp Ser Gly Ile Asp Leu Gln Cys Thr Leu Ala Pro
        915                 920                 925

Asp Gly Ser Phe Ala Trp Ser Trp Arg Val Lys His Gly Gln Leu Glu
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Asn Arg Pro
945
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<212> PRT
<213> Homo sapiens

<400> 3

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Lys Val Arg Val Ser Gln Arg Glu Leu Ser Arg Gly Val Cys Ala Glu
            20                  25                  30

Arg Tyr Ser Gln Glu Val Phe Glu Lys Thr Lys Arg Leu Leu Phe Leu
        35                  40                  45

Gly Ala Gln Ala Tyr Leu Asp His Val Trp Asp Glu Gly Cys Ala Val
    50                  55                  60

Val His Leu Pro Glu Ser Pro Lys Pro Gly Pro Thr Gly Ala Pro Arg
65                  70                  75                  80

Ala Ala Arg Gly Gln Met Leu Ile Gly Pro Asp Gly Arg Leu Ile Arg
                85                  90                  95
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```
Ser Leu Gly Gln Ala Ser Glu Ala Asp Pro Ser Gly Val Ala Ser Ile
            100                 105                 110

Ala Cys Ser Ser Cys Val Arg Ala Val Asp Gly Lys Ala Val Cys Gly
        115                 120                 125

Gln Cys Glu Arg Ala Leu Cys Gly Gln Cys Val Arg Thr Cys Trp Gly
    130                 135                 140

Cys Gly Ser Val Ala Cys Thr Leu Cys Gly Leu Val Asp Cys Ser Asp
145                 150                 155                 160

Met Tyr Glu Lys Val Leu Cys Thr Ser Cys Ala Met Phe Glu Thr
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<212> PRT
<213> Homo sapiens

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Lys Val Arg Val Ser Gln Arg Glu Leu Ser Arg Gly Val Cys Ala Glu
            20                  25                  30

Arg Tyr Ser Gln Glu Val Phe Asp Pro Ser Gly Val Ala Ser Ile Ala
        35                  40                  45

Cys Ser Ser Cys Val Arg Ala Val Asp Gly Lys Ala Val Cys Gly Gln
    50                  55                  60

Cys Glu Arg Ala Leu Cys Gly Gln Cys Val Arg Thr Cys Trp Gly Cys
65                  70                  75                  80

Gly Ser Val Ala Cys Thr Leu Cys Gly Leu Val Asp Cys Ser Asp Met
                85                  90                  95

Tyr Glu Lys Val Leu Cys Thr Ser Cys Ala Met Phe Glu Thr
            100                 105                 110
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<213> Artificial sequence

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gcctccgaag ctgacccatc tggggtagcg tccattgcct gttcctcatg cgtgcgagcc 360

gtggatggga aggcggtctg cggtcagtgt gagcgagccc tgtgcgggca gtgtgtgcgc 420

acctgctggg gctgcggctc cgtggcctgt accctgtgtg gcctcgtgga ctgcagtgac 480

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<212> DNA
<213> Homo sapiens

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gtctgcggtc agtgtgagcg agccctgtgc gggcagtgtg tgcgcacctg ctggggctgc 240

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<223> Single strand DNA oligonucleotide

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